structure. We provide a management plan for a bald eagle (*Haliaeetus leucocephalus*) roost at the Bear Valley National Wildlife Refuge (BVR) in southern Oregon. Roost habitat was studied on 3 spatial scales of increasing size, including roost trees, vegetation surrounding roost trees (i.e., roost sites), and 4 subsections of the main roosting area (i.e., subroosts). Primary roost tree species included Douglas-fir (*Pseudotsuga menziesii*), ponderosa pine (*Pinus ponderosa*), and white fir (*Abies concolor*). Bald eagles used the largest (diameter at breast height), tallest, and oldest trees with open branching patterns. Differences in eagle use were attributed to growth rates and structural features of the 3 primary roost species. Douglas-fir was used at a younger age and was characterized by more open branching than other species. Ponderosa pine, an important species used by eagles in other areas in the region, did not receive high use at the BVR due to prior logging of the larger (>60 cm dbh) pines. When compared to unused sites, roost sites had 2–3 times as many large-diameter Douglas-fir, twice as many trees with open branching, 4 times as many snags, and greater tree height diversity. Subroost use by eagles was positively related to high densities of large Douglas-fir, low densities of late-seral white fir, and low stump densities. Mechanical thinning and prescribed fire were recommended to reduce white fir densities in portions of the roost where establishment of ponderosa pine and Douglas-fir were apparently inhibited by competition with late-seral white fir.

## EFFECTS OF FOOD ON BALD EAGLE DISTRIBUTION AND MOVEMENTS ON THE NORTHERN CHESAPEAKE BAY

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We studied the effects of food on bald eagle distribution on the northern Chesapeake Bay during 1986 through 1989. We monitored the distribution of unmarked bald eagles through monthly aerial shoreline surveys, and the movements of 39 radio-tagged bald eagles through twice-weekly telemetry flights. We also monitored the distribution and abundance of fish and waterfowl which were the primary prey eaten by eagles during our study. Preliminary results indicated that annual cycles in bald eagle distribution were highly correlated with annual cycles in fish and waterfowl distribution on the study area. We subsequently initiated an experimental feeding program to test for cause/effect in this correlation. Fish were supplied daily at 2 sites on Aberdeen Proving Ground, Maryland, beginning in late September 1988. This was to simulate a non-declining food source at the time of year when fish abundance declines on the northern Bay, and bald eagles leave the study area for southern portions of the bay. The feeding program did not seem to curtail the movement of bald eagles to the southern portion of the bay, although it did have a significant impact on the distribution of eagles that remained on the study area. A greater understanding of the factors affecting bald eagle distribution, including the relative importance of each, will allow managers to more effectively manage bald eagle populations.

## BREEDING BIOLOGY OF THE WHITE HAWK IN GUATEMALA

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Although thirty-nine percent of the world's falconiform species are found in the rainforest, very little is known about these raptors. The White Hawk (*Leucopternis albicollis ghiesbreghti*), a medium-sized *Buteo*-like raptor, is found from southern Mexico through Belize and Guatemala. I studied this neotropical species during the 1991 and 1992 breeding seasons in Tikal National Park, Guatemala, in order to describe their general breeding biology The White Hawks begin courtship displays and nest building in February, and by mid- to late-March egg laying and incubation begin. Their stick nests were found in five different species of trees. The mean dbh of six nest trees was 70.1 cm and the nest height averaged 25.4 m above the ground. Nests averaged 43.8 × 67.3 cm across and 28.4 cm tall. Each nest contained one egg ($N = 4$) Of one hundred sixty-four prey items observed, 56% were reptiles, 20% unidentified, 14% mammals, 6% birds, 2% insects, and 2% amphibians. Prey items varied from small lizards (*Anolis* sp.) to medium-sized squirrels (*Sciurus deppei*). Prey items were delivered at a rate of 1 to 4 (mean = 1.9) times per day. The incubation period was 34–36 days ($N = 2$) and one chick fledged 88 days after hatching. Home ranges for one breeding male and one sub-adult were 208 ha and 46 ha, respectively. Although yellow is the reported eye color for this subspecies, all 20 birds located in northern Guatemala had brown eyes.

## GREAT HORNED OWLS DO NOT EGEST PELLETS PREMATURELY WHEN PRESENTED WITH A NEW MEAL

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Whether owls are able to cephalically, or even voluntarily, control pellet egestion in response to external stimuli has long been a question. It has recently been shown that meal-to-pellet interval (MPI) in one owl can be influenced by the visual presence of other owls, so some cephalic control is possible. Our objective was, therefore, to determine if Great Horned Owls could egest a pellet when presented with a new meal near the time when they would be expected to egest from a previous meal. Four owls, held individually in environmentally controlled rooms, were fed 40–60 g/kg daily at 0800 H for about 4 weeks. Mean and